

Draft Scope
for the
Environmental Impact Statement (EIS)
Tompkins County Public Safety Communications System

This document outlines the anticipated contents of the Environmental Impact Statement that will be prepared for the Public Safety Communications System project (herein referred to as the Project). Public comment on this document will be accepted from February 23, 2001, to 5:00 p.m., March 26, 2001. Please mail, or hand-deliver all comments in writing to:

Tompkins County Planning Department
121 East Court Street
Ithaca, NY 14850

Your comments will be taken into consideration in the preparation of the Final Scope.

For more information on the Draft Scope and other documents relating to this project, call the Tompkins County Planning Department, 607-274-5560.

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DRAFT SCOPING DOCUMENT

PUBLIC SAFETY COMMUNICATION PROJECT TOMPKINS COUNTY, NEW YORK

PROJECT DESCRIPTION

Tompkins County is seeking to replace and/or enhance the communication system currently in use by public safety (fire, EMS and police) officials and other government agencies countywide. The current system, composed of several independent systems woven together to provide for voice and data transfer, is thirty to forty years old and incorporates dozens of isolated radio frequencies, many of which are incompatible. Currently, much of the primary system used for voice communication uses an analog signal which makes it prone to interference; it is also becoming increasingly obsolete due to the Federal Communications Commission's actions narrowing bandwidth.

Specific problems with the current system include:

- Lack of interoperability – The current system uses many radio bands, which makes communication among different emergency agencies slow or sometimes impossible.
- Lack of coverage – Gaps in radio coverage hamper users' ability to adequately respond to emergencies.
- Congestion – Users report radio congestion and confusion during incidents involving multiple agencies or events.
- Age – Much of the existing infrastructure and equipment is outdated and is in danger of failing. Some of the equipment is no longer manufactured and can not be repaired.
- Underbuilt towers – Many of the existing towers are unsuitable for modern equipment, do not have power-surge or lightning protection, and are not suitably located for an improved system.

In November 2000, the County retained New York State Technical Enterprises Corporation (NYSTEC) to serve as wireless consultants for this Project. A study was commissioned to identify problems with the current system, evaluate the County's needs and recommend options for meeting those needs. A report, prepared by NYSTEC, recommends that the County replace the current communication system. NYSTEC summarized the available technologies for wireless communication and public safety; they concluded that the use of a digital, trunked 800-megahertz (MHZ) frequency technology would provide the best option to address the County's current and future communications needs. Similarly, NYSTEC recommended that the County continue efforts to coordinate with the New York State Office of Technology's Statewide Wireless Network (SWN). The SWN project seeks to implement a statewide communication system that will be mandated for use by all state agencies and will potentially be available for use by local public safety agencies.

Therefore, the Project is the construction and operation of a wireless public safety communication system using 800 MHz frequencies and digital, trunked technology. Opportunities to collaborate with the New York State Office of Technology's Statewide Wireless Network will also be explored.

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During project development, various technologies, phased approaches, and cost-sharing opportunities (e.g. public/private partnerships, SWN) will be explored and analyzed, as well as the potential environmental impacts. This information will help define the County's requirements and form the basis of a Request for Proposals (RFP) from vendors with expertise in communication system design and layout. Responses from vendors will help determine the specific alternatives to be evaluated in the draft EIS. While some alternatives are known at this time, others may arise during project development, or from responses to the RFP; these will also be evaluated in the draft EIS. The proposed action will be selected from these alternatives.

Tompkins County, as the sponsor of this Project, will prepare the Environmental Impact Statement (both a draft and final version), pursuant to (New York State Environmental Quality Review Act) SEQR. The Environmental Impact Statement will examine the potential impacts of the Project.

I. INTRODUCTION

A. Scope of the Document

This section will describe the document layout and issues addressed in the EIS.

B. Background and History of the Project

This section will describe the history of the decision-making process as it relates to the Project, the issuance of a positive declaration, and the development of the EIS. This section will summarize work conducted by NYSTEC to define the needs, objectives and requirements of the Project sponsor, and will include a discussion of technological options considered for this Project.

C. General Project Location

This section will describe the general location of the Project area, regional setting, as well as significant physical and topographic features.

II. PROJECT PURPOSE, NEED and BENEFITS

A. Description of Existing System

This section will provide a summary of the existing communication system including but not limited to: evaluation of sites, technical issues (e.g. coverage, capabilities and capacity), functionality, surveys and interviews of public safety user representatives.

B. Public Need and Benefits of the Project

This section will describe the public need that currently exists for the proposed Project and the benefits that will be gained from it.

C. Goals and Objectives of Project

This section will discuss the goals and objectives of the Project based on the identified needs of the Tompkins County public safety community and the Project sponsor.

D. Description of Requirements of Project Sponsor

This section will provide a summary of the functional requirements of a public safety communications system.

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For the purpose of this Project, a public safety communications system will be selected based upon its ability to satisfy the criteria listed below:

- meet the needs of public safety in Tompkins County;
- balance desired and adequate levels of service;
- be economically feasible; and,
- be the least environmentally intrusive.

III. PROPOSED ACTION and ALTERNATIVES

A. Identification of Proposed Action (i.e. Preferred Alternative)

This section will describe the proposed action, and evaluate its ability to meet the needs, objectives and functional requirements of the Project. This section will briefly describe the design, layout and operation of the proposed action. The following information will be presented for the proposed action:

1. Description of Proposed Action
 - Brief description of communication system
 - Ability to meet goals and objectives of sponsor
 - Effect on project sponsor
 - Effect on public need
2. System Design and Architecture
 - Technical description of communication system (e.g. access language, modulation and information transport mechanisms)
 - Description of hardware, software and infrastructure (e.g. computer hardware and software to utilize technology and necessary infrastructure)
 - Location of project infrastructure and siting
3. System Coverage, Capacity and Capabilities
 - Description of type of coverage and critical coverage areas (e.g. accessibility for users, mobile, portable, outdoors, in-building)
 - Capacity of the system (e.g. traffic load, grade of service, voice, data)
 - Capability of system (e.g. operational use, communication features)

4. Reason for Inclusion as the Proposed Action vs. an Alternative

This section will discuss any significant beneficial and adverse impacts of the proposed action, associated mitigation measures, and why this was selected as the proposed action. Impacts are examined in greater detail in Sections V and VI of this document.

5. Permits, Approvals and Funding

This section will discuss any required permits, approvals and funding associated with the proposed action.

B. Alternatives to the Proposed Action

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This section will describe alternatives to the proposed action, evaluate the ability of each alternative to meet the needs, objectives and functional requirements of the Project, and identify issues as to why the proposed action is preferable to the alternative being discussed. The items discussed in this section will include the No Action Alternative, and Alternative Technological Options (including discussion of vendor proposal received by the County in response to its Request for Proposals that were not selected as the Proposed Action).

The following information will be presented for each alternative to the proposed action:

1. Description of Alternative
 - Brief description of communication system
 - Ability to meet goals and objectives of sponsor
 - Effect on project sponsor
 - Effect on public need

2. System Design and Architecture
 - Technical description of communication system (e.g. access language, modulation and information transport mechanisms)
 - Description of hardware, software and infrastructure (e.g. computer hardware and software to utilize technology and necessary infrastructure)
 - Location of infrastructure and siting

3. System Coverage, Capacity and Capabilities
 - Description of type of coverage and critical coverage areas (e.g. accessibility for users, mobile, portable, outdoors, in-building)
 - Capacity of the system (e.g. traffic load, grade of service, voice, data)
 - Capability of system (e.g. operational use, communication features)

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4. Reasons for Rejecting this Alternative as the Proposed Action

This section will discuss any significant beneficial and adverse impacts of the alternative, associated mitigation measures, and why this alternative was not selected as the proposed action.

IV. NATURAL RESOURCES: ENVIRONMENTAL SETTING, IMPACTS OF THE PROPOSED ACTION AND MITIGATING MEASURES

A. Geology Soils and Topography

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

B. Water Resources

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

C. Wetlands

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

D. Biological Resources: Flora, Fauna and Habitat

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)

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3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

E. Agricultural Resources

1. Environmental Setting / Existing Conditions
 - Soils
 - Active farmland
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

V. HUMAN RESOURCES: ENVIRONMENTAL SETTING, IMPACTS OF THE PROPOSED ACTION AND MITIGATION MEASURES

A. Community Character

1. Environmental Setting / Existing Conditions
 - Land use and zoning (consistency with surrounding land use, existing municipal ordinances, and zoning)
 - Growth inducing impacts
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
 - Financial implications to municipalities
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

B. Visual Resources

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)

4. Unavoidable Impacts

C. Public Health

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

D. Cultural Resources

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

E. Noise

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

F. Transportation Services

1. Environmental Setting / Existing Conditions
2. Impacts of the Proposed Action
 - Short-term (construction phase)
 - Long-term (operations phase)
3. Mitigation Measures
 - Short-term (construction phase)
 - Long-term (operations phase)
4. Unavoidable Impacts

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VI. IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

A. Land Resources

B. Materials Resources

C. Financial Resources

VII. EFFECTS ON THE USE AND CONSERVATION OF ENERGY RESOURCES

VIII. ASSESSMENT OF UNAVAILABLE INFORMATION / UNCERTAINTIES

APPENDICES

NYSTEC Reports
List of interested agencies
Regulatory requirements